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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/415,507	10/08/1999	MUKESH DALAL	020431.0562	4917

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EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/415,507

Applicant(s)

DALAL, MUKESH

Examiner

Susanna M. Diaz

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This Non-Final Office action is responsive to Applicant's Appeal Brief filed May 16, 2003.

Applicant's arguments have been deemed persuasive; therefore, the previously pending art rejection is withdrawn.

Claims 1-47 are presented for examination.

Claim Objections

2. Claim 46 is objected to because of the following informality:

Claim 46, line 1, delete "method", insert --system--

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 11-32 and 47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural

phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, method claims 11-32 and 47 recite the useful, concrete, and tangible result of optimizing and reoptimizing the production of a demand; however, said method does not incorporate the use of technology. For example, the recited steps could be performed entirely by hand (i.e., entirely by a human). Therefore, claims 11-32 and 47 are deemed to be non-statutory since they are not limited to the technological arts.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a system; however, the system merely comprises software components. A system must comprise at least two physical components, such as hardware; therefore, it is improper to claim that a system comprises software *per se*. In order to overcome this rejection, it is recommended that Applicant incorporate a

physical component, such as a processor, into the claims and then specify that the various software components are implemented by the physical component. The same rejection applies for dependent claims 2-10 as well as claims 33-43.

In lines 5-6 of claim 1, it is not clear what word/phrase is referred to by phrase "operable to." For example, does "operable to" further describe the capabilities of the first entity or of the second entity or does it provide more details regarding what the step of establishing a demand entails? Additionally, the scope of the phrase "operable to" is vague and indefinitely. Does it mean that the modified word/phrase is capable of performing the following steps or that said steps are actually carried out? Please note that "operable to" is used throughout claims 1-10; therefore, all occurrences of this term should be addressed accordingly.

It is not clear which entity is carrying out the steps recited in lines 6-8 of claim 1. It seems logical that the first entity would be performing these steps since the first entity supplies the supplies (line 4); however, the possessive pronoun "its" is used throughout the claim to seemingly refer to both the first and second entities. For example, see lines 7, 9, and 16 for multiple occurrences of "its." This invokes the following explicit questions: Which entity is optimizing production of the supplies in line 7 of claim 1? Which entity is optimizing production of the demand in line 9 of claim 1? Which entity is reoptimizing production of the demand in line 16 of claim 1? Please replace all occurrences of "its" with more specific references to either the first or second entity. Please note that the modifier "its" is used throughout claims 1-10; therefore, all occurrences of this modifier should be addressed accordingly.

Claim 1 is also vague as to who is performing each of the steps recited in lines 9-17 (which is partially related to the problem of using "its," as discussed above).

Presumably, the second entity is performing the steps of communicating (line 10) and receiving (lines 11-14); however, it is not clear who is generating the constraint (line 15).

Claim 1 makes various references to a "production of the demand" (see lines 9 and 16). A demand *per se* is not produced. In other words, a demand *per se* is not a physical item; instead, it represents the level of desire for a produced item. Does Applicant intend to claim something more along the lines of "demanded supplies"?

In claim 1, it is not clear what is meant by "using the request as a constraint, the promise identifying a culprit as a cause for the promise not satisfying the request if the promise does not satisfy the request" (lines 12-14). First, it is not clear how a request for supplies serves as a constraint. Is it an aspect of the request that presents a constraint (e.g., quantity requested, requested date of delivery, etc.)? How is the request as a whole a constraint? Additionally, what is the difference between a constraint and a culprit? Both imply the occurrence of something that impedes fulfillment of the request; however, the subtleties of each term are not clearly understood by the Examiner.

Claim 1 recites "a request for the supplies" in lines 7 and 9; however each request is optimized by a different entity. Claim 1 subsequently makes various references to "the request" (lines 12-13 and 17); however, it is not clear which "request for the supplies" (the one recited in line 7 or the one recited in line 9) is being referred to.

Claim 2 recites "a request" (line 3) and "the request" (line 4). There are at least four different requests recited throughout claim 2 (which incorporates all of the limitations of independent claim 1). There is "a request for the supplies" (line 7 of claim 1), "a request for the supplies" (line 9 of claim 1), "a new request" (line 17 of claim 1), and "a request for the supplies" (line 3 of claim 2). Please clarify in the claim language the distinctions between the various recited requests. For example, Applicant may consider using the terms "first request," "second request," etc. Please note that this problem (i.e., multiple references to random requests) is prevalent throughout claims 1-10; therefore, all occurrences of the term "request" should be addressed accordingly.

Similarly, claim 3 continues to make references to different constraint and culprits without specifically distinguishing all of the previously recited constraints and culprits. See lines 7, 9, and 10 of claim 3. Please note that this problem (i.e., multiple references to random constraints and culprits) is prevalent throughout claims 1-10; therefore, all occurrences of the terms "constraint" and "culprit" should be addressed accordingly.

Claim 4 recites that each entity is operable to optimize its respective production (e.g., supplies of the first entity and demand of the second entity) independently of the other entity; however, the goal of the claimed invention appears to be the ability to optimize production of a supply to be used in fulfilling a demand in a manner that is conducive to the needs of both the first and second entities. This is because the second entity's demanded product is dependent on the availability of supplies from the first entity. Therefore, it is not understood how it can be said that the first and second entities are optimizing their respective production independent of one another.

Claims 11-47 recite limitations similar to those recited in claims 1-10 and all claims are written in a similar format; therefore, most of the rejections of claims 1-10 under 35 U.S.C. 112, 2nd paragraph presented above apply to claims 11-47 as well. Applicant is responsible for making any necessary corrections to address the issues raised as rejections under 35 U.S.C. 112, 2nd paragraph throughout all pending claims.

Appropriate correction is correction.

In light of the extent of rejections applied to the claims under 35 U.S.C. 112, 2nd paragraph, the Examiner cannot adequately ascertain the metes and bounds of the invention for purposes of applying art. However, a potential issue of public use/on-sale bar has been raised below.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required as follows:

The assignee of the instant application is i2 Technologies, Inc. The Examiner has come across an archived web site describing the functionality of i2 Technologies'

product, RHYTHM. This web site [URL:

http://www.i2.com/html/i2_solutions_for_demand_planning.html] was archived on

January 31, 1998 by web.archive.org. RHYTHM optimizes production planning based on constraints throughout the supply chain (page 1). Production can be reoptimized if a major disruption occurs (page 2). RHYTHM can be linked to ERP systems in order to assess capabilities of the supply chain in real time (page 4). RHYTHM's Demand Planning module "fully supports the internal collaboration that aligns all of the various plans into a consensus plan" (page 6). Further, RHYTHM utilizes the concepts of infinite capacity planning to create a finite capacity plan (page 13). Similarly, as best understood by the Examiner, the claimed invention is directed toward a supply chain planning system/method in which supply and demand are optimized at various stages of the supply chain in order to best meet the needs of all supply chain entities as a whole. RHYTHM too assists in performing such an analysis; therefore, the Examiner requests information regarding the capabilities of RHYTHM as it existed prior to October 8, 1998 (one year before Applicant's filing date of October 8, 1999) and how it differs from the claimed invention. A response may include product manuals, product releases, etc. describing RHYTHM as it existed prior to October 8, 1998.

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Bellini et al. (U.S. Patent No. 5,974,395) -- Discloses a system and method for extended enterprise planning across a supply chain.

Huang et al. (U.S. Patent No. 6,151,582) -- Discloses a decision support system for the management of an agile supply chain.

Milne et al. (U.S. Patent No. 5,943,484) -- Discloses a system for advanced material requirements planning in microelectronics manufacturing.

Kennedy (U.S. Patent No. 6,188,989) -- Discloses a system and method for managing available to promised product (ATP).

Dangat et al. (U.S. Patent No. 5,971,585) -- Discloses a system for "best can do" matching of assets.

Parad (U.S. Patent No. 5,369,570) -- Discloses a method and system for continuous integrated resource management.

Helms ("Supply Chain Forecasting - Collaborative Forecasting Supports Supply Chain Management") -- Discloses CFAR technology, which facilitates online, collaborative demand forecasting for the supply chain.

Dobrin et al. ("Make Better Schedules") -- Discloses MRP and DRP scheduling systems for planning supply chain activities.

Davis ("Tough Customers") -- Discloses order acceptance through an MRP system.

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"Manugistics Agrees to Acquire ProMIRA Software" -- Discloses software for optimizing constraints through a supply chain network.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703)308-1113.

Any response to this action should be mailed to:

**Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450**

or faxed to:

(703)305-7687 [Official communications; including
After Final communications labeled
"Box AF"]

(703)746-7048 [Informal/Draft communications, labeled
"PROPOSED" or "DRAFT"]

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Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 22202, 7th floor receptionist.

Susanna Diaz
Susanna M. Diaz
Primary Examiner
Art Unit 3623
August 11, 2003